REMARKS

This application has been carefully reconsidered in view of the Office Action of May 5, 2004. In respect to the restriction requirement between the claims of Groups I, II and III, applicants confirm the election of Group I. This requirement for restriction is traversed for reasons set forth later in these remarks. By this amendment, claim 1 has been amended as suggested by the Examiner. Accordingly, it is believed that any informalities have been cured and that all of the claims in this case are in full compliance with the requirements of 35 U.S.C. §112. In addition, new claims 30 and 31 are presented herewith. Support for the subject matter of these claims is found in Applicant's specification in paragraph 15.

The rejection of claims 1-14 under 35 U.S.C. §103 as obvious over U.S. Patent No. 5,942,568 to Herrmann is respectfully traversed. In addressing the Herrmann patent, it may be helpful to summarize applicants' invention, as it involves a very important sequence of procedures in implementing the claimed process. As summarized in the Office Action, the polymerization process set forth in claims 1-14 involves the contact of the ethylenically unsaturated monomer with a polymerization catalyst in which a stereospecific metallocene catalyst is supported on the specified polyamide support having an alumoxane co-catalyst supported on the polyamide support by reaction of the alkyl alumoxane and the polyamide support. As acknowledged by the Examiner, the patent to Herrmann not only fails to disclose the use of a supported metallocene as called for in applicants' claims, but discloses the use of a supported catalyst obtained by contacting the bridged metallocene disclosed there with methyl alumoxane in toluene and by contacting this solution with the polyamide support particles. The use of this particular catalyst is reinforced by the various examples of Herrmann in which the bridged metallocenes disclosed there are dissolved in toluene and are reacted with the methyl alumoxane with the reaction mixture then left to stand for a period of time. Thus, in Examples 1,

2 and 6 dealing with the use of a polyamide powder, the reaction between the alumoxane and the metallocene solution is allowed to proceed for a period of 15 minutes before the reaction solution is concentrated by evaporation under vacuum to a reduced volume. Only at this point is the concentrated reaction solution brought into contact with the support powder.

Thus, applicants would respectfully submit that when the Herrmann patent is considered in its entirety, the process disclosed there cannot be carried out by employing a catalyst in which contact of the support and the alumoxane occurs prior to support of the metallocene catalyst on the alumoxane-modified polyamide support. In fact, to attempt to modify the Herrmann patent in a manner to arrive at applicants' invention would be directly contrary to the teachings in Herrmann. As recognized by the Federal Circuit and PTO Board of Appeals and Interferences, obviousness under 35 U.S.C. §103 cannot be established by modifying a prior art reference in a manner directly contrary to its teachings. Thus, as noted by the Board of Appeals in *Ex parte Chicago Rawhide Mfg. Co.,* 223 USPQ 351, 353 (POBAI 1984):

> In order to meet the terms of the claims on appeal, the elements of the Baney device would have to be arranged in a manner different from that disclosed by Baney. The elements of the reference would also be required to coact differently from the way they coact in the arrangement disclosed by the reference. The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of the appellant's specification, to make the necessary changes in the reference device (emphasis added).

Here, there clearly is no motivation to one of ordinary skill in the art to attempt to modify Herrmann to operate as required in applicant's claims.

The decisions in *In re Burans* and *In re Gibson* referred to in the Office Action have been carefully considered but would not appear to be applicable here. It is noted that both of these decisions were rendered long before the enactment of the Patent Act of 1952 and the provision of

35 U.S.C. §103 addressing the statutory requirement for non-obvious subject matter. Further, it is noted that the Gibson decision does not stand for the proposition that the selection of any order of mixing ingredients is *prima facie* obvious as asserted in the Office Action. In fact, the Gibson decision does not appear to address the subject of obviousness or non-obviousness. Instead, the Gibson decision was based upon a determination that a "choice of sequence does not involve invention...". Similarly, it is respectfully submitted that there is no requirement in addressing the issue of obviousness or non-obviousness under 35 U.S.C. §103 of establishing the presence of "new or unexpected results" before a determination of non-obviousness can be made. Instead the test is simply whether or not, in view of the prior reference, there is a *prima facie* case of obviousness in the first instance. If there is a determination of a *prima facie* case of obviousness, then the presence of unexpected results can establish patentability by rebutting the *prima facie* case of obviousness. Attention in this regard is invited to MPEP §2142.

It appears that the office action makes the assumption that the order of addition of the components practiced in applicants' invention is of no significance. This is not the case as explained, for example, in paragraph 15 (page 12) of applicants' specification. The orientation of the initially added alumoxane on the surfaces of the support particles functions to activate the subsequently added metallocene. The importance of this function is illustrated by the circumstances involving the addition of the alumoxane. When the alumoxane is added initially to the polyamide support particles, the alumoxane reacts with any water on the support so that water is either not available or is at least present in a diminished amount when the metallocene is added. Since water acts as poison for the metallocene, water on the support results in some deactivation of the metallocene to a lower catalyst activity then would otherwise be the case. Thus, if one were to follow the procedure in Herrmann, any water on the support would be

available for the deactivation of the metallocene resulting in a lower catalyst activity than would be the case in which the alumoxane is initially added as in applicants' invention.

In addition to the reasons advanced above which are applicable to all the claims, it is noted that the Herrmann patent, no matter how modified, fails to disclose an average particle size within the range of 5-60 microns, or within the range of 10-30 microns as set forth in claim 2. Herrmann simply specifies two particle size ranges; one within the range of 200-400 microns and the other less than 200 microns. There is nothing in the Herrmann reference which would lead one of ordinary skill in the art to the use of polyamide support particles having the average particle size as specified in claims 1 and 2.

In addition, it is noted that the reference fails to disclose the process in which the alkylalumoxane is predominately supported on the outer surface of the polyamide particles as specified in claim 6. Further, Herrmann fails to disclose the use of polyamide support particles as support for two stereospecific metallocene as required in claim 3.

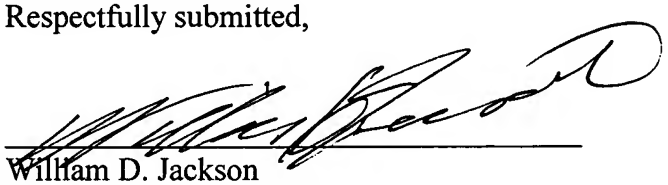
Returning to the restriction requirement between the claims of Group I, II and III, the requirement is traversed for the following reasons. Implicit in the Examiner's restriction requirement is the determination that the three groups of claims are patentably distinct and that separate fields of search are required. However, the claims of Group II and III have a common classification as noted in the office action. Further the asserted utility of the catalyst composition forming the subject matter of Groups II and III is in the polymerization of olefins as called for in the claims of Group I. Moreover, the position taken in the office action that the catalyst composition forming the subject matter of Group III can be used in a materially different process such as hydrogenation or isomerization is totally unsupported. In any case, the fields of search for the subject matter of the three groups of claims would be largely coextensive. Accordingly, it would appear that the examination in one case of the three groups of claims, notwithstanding

involving patently distinct inventions, would serve the best interest of the Patent and Trademark Office, the public and the present applicants. Accordingly, it is respectfully requested that the restriction requirement be withdrawn.

For reasons advanced above, it is believed that the claims are entitled to be examined in a single application and are patentable over the prior art. Accordingly, an early reconsideration and allowance of this application is respectfully requested.

The Commissioner is authorized to charge any fee due in connection with the submission of this document to the Locke Liddell & Sapp LLP deposit account no. 12-1781.

Respectfully submitted,



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